

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brian L. Gerhardt

Art Unit: 3627

Serial No.: 09/523,079

Examiner: O'Connor, Gerald J.

Filed: March 10, 2000

For: VIRTUAL WARE

VIRTUAL WAREHOUSE PARTS DISTRIBUTION SYSTEM AND PROCESS

### **DECLARATION IN SUPPORT OF PATENTABILITY**

Mail Stop: AMENDMENT Hon. Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

- I, Brian L. Gerhardt, declare and state as follows:
- 1. I have reviewed and understand the specification, drawings and claims (both original and presently pending) of U.S. Patent Application 09/523,079 (hereafter "the '079 application") filed on March 10, 2000.
- 2. I am the original, first and sole inventor of the invention(s) recited in the claims of the '079 application (hereafter "Claimed Invention").
- 3. I have reviewed and understand the subject matter described and claimed in U.S. Patent Application US2002/0065764) to Brodersen et al., entitled "Marketing and purchasing components and services," published May 30, 2002 (hereinafter "Brodersen et al.").
- 4. To the extent that Brodersen et al. describes subject matter that relates to the Claimed Invention of the '079 application, the facts recited herein and the attached evidence

shows that the subject matter claimed in the '079 patent application was conceived by me and reduced to practice prior to the date (December 17, 1999) asserted by the Office as the effective filing date of the parent application of Brodersen et al. Therefore, Brodersen et al. does not constitute prior art to the '079 application.

### FACTS AND DOCUMENTARY EVIDENCE

- 5. The invention described in the '079 application was first conceived by me between January and February 1999, while working at General Electric Company. The invention was intended as an infrastructure to connect inventory at many locations and make this inventory globally available.
- 6. The concept was proven by a partial implementation using a database coding language in April 1999. A more complete implementation was planned in a different database coding language and completed in December 1999.
- 7. I prepared an invention disclosure to send to the GE Legal Department. A copy of this invention disclosure is attached. This disclosure was completed and signed by me on December 6, 1999 and witnessed by fellow employee Thomas A. Miller on the same day. I obtained two additional witnesses January 6, 2000, one of whom misdated his signature on the front page with the incorrect date "1/6/99." The copy of the invention disclosure letter includes a hand-written annotation referring to an email on "7-16-99." This annotation was not part of the disclosure sent to the GE Legal Department. There is an anomaly in the page numbers shown on the disclosure form (e.g., "Page 3 of 2") and pages after page 3 were not numbered in the original submission. However, all of the pages were completed by me no later than December 6, 1999, as shown by my signature and date on every page. [Page numbering A1 through A10 has been added to the attached copy of the invention disclosure for convenience. Also, information not relevant to the issues discussed herein, including personal information, has been redacted from pages A1 and A2. The terminology "GT85(3/99 DRAFT)" refers to the date on which the type of invention disclosure form on which the disclosure was submitted was introduced for use within GE and has nothing to do with the date of invention or reduction to practice.]

- 8. On information and belief, the invention disclosure letter was promptly reviewed by the GE Legal Department and sent to outside counsel for preparation of the '079 application, and the application was promptly prepared and filed on March 10, 2000.
  - 9. Regarding specific features alleged to be found in Brodersen et al.:
- (a) A networked-based parts distribution system is described on page A3, paragraph 1.4.1-6 and pictorially on pages A4, A5, A6, A7, A8, and especially A9, item 2, where it is noted that the database is accessed via the Web.
- (b) A plurality of buyer computers for operation by a system participant desiring to obtain one or more parts is clearly in the combination of A8 and A9, where sites are shown in disparate locations and database access is described as via the Web.
- (c) A plurality of seller computer computers for operation by a system participant desiring to sell one or more parts is shown in the combination of A5, A6, A7, A8, A9, and A10, particularly wherein brokers (plural) upload information about parts. Also see page A3, paragraph 1.5 describing multiple suppliers.
- (d) At least one server computer, wherein said buyer computers, said seller computers, and said server computer are interconnected as a computer network is shown A7, A8, and A9.
- (e) Said server computer being programmed to receive part related data from said seller computers and use said data to maintain a database of all available parts is described at A3, paragraph 1.4.1-3, and is illustrated at A4-A8.
- (f) Said server computer programmed to receive part requests from said buyer computers and select one or more parts from said database in response to said requests is described at page A3, paragraph 1.4.4-6, and is illustrated at A4-A8.
- (g) Said parts in said database sorted into a plurality of inventory categories is shown and described at page A3, paragraph 1.4.1, and at A4, A5, A6, and A8.

- (h) Said parts in at least one of said inventory categories further sorted into a plurality of sub-inventory categories based on part condition is shown and described at page A3, paragraph 1.4.1, and at A4, A5, and A6.
- (i) A signed master agreement between said system participants, including said system participants desiring to sell parts and said system participants wishing to obtain parts, is shown and described at page A6, paragraph 2 under item "OH" and at page A9, item 3.
- (j) Said master agreement specifying terms of blanket purchase orders and said master agreement providing for auditing to check accuracy of said part-related data received from said seller computer is shown and described at "Central QC Records Approval" at page A4, by the same icon at page A5, and at the bullet point "Quality Control" on page A10.
- (k) Said server computer to relay a purchase order consistent with said specified terms of blanket purchase orders issued by one of said buyer computers to an appropriate one of said seller computers is shown and described at page A3, paragraph 1.4.5 and 1.5, page A6, item 2 under "OH," page A8, "Web system issues a blanket PO to the respective site," page A9, items 3 and 4, and page A10.
- (1) Said server computer selecting parts according to a buyer-specific picking order is shown and described at page A3, paragraphs 1.4.4, 1.4.5, and 1.5, page A6, item 2 under "OH," pages A7 and A8, "Customer picking rules looks to sub-inventory to fill demand, page A9, paragraph 2, and the first bullet point on page A10.
- (m) The computer network is the Internet is shown and described at page A9, item 2 ("the Web").

### **DECLARATION**

### 10. As the person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and any patent issued thereon.

**SIGNATURE** 

**SOLE INVENTOR** 

Full Name:

Brian L. Gerhardt

Signature:

Residence:

Citizenship: US

Post Office Address:

The following are attached and made a part hereof:

Attachment A: December 6, 1999 Invention Disclosure (with portions redacted and page numbers A1-A10 added.)

Alan L. Cassel Registration No. 35,842 ARMSTRONG TEASDALE LLP One Metropolitan Square, Suite 2600 St. Louis, Missouri 63102-2740 (314) 621-5070

To:	GE Aircraft Engines	For Legal Operation Use  Docket Number 13DV 13 466	
Patent Attorney H17, Evendale	Invention Disclosure	Date Opened Jan. 7, 2000	
,	General Electric Company	- By M. Fell	

1.0 DESCRIPTION OF THE INVENTION: Prepare and attach a brief written description, sufficient to inform the Patent Evaluation Board (generally knowledgeable in the subject matter) of your invention. Please use the outline provided below.
 1.1 Title. Provide a title that is descriptive of your invention.
 1.2 Statement of the Problem: What need does your invention address? Briefly describe the problem or

1.3 State of The Art: How has the need been addressed before? Briefly describe how the problem was addressed prior to your invention. List any relevant literature of patents of which you are aware.

- 1.4 Description and Operation: How does your invention work? Briefly describe the important features of your invention and explain how to use the invention to solve the problem. Attach pictures, e.g., drawings, sketches, graph, flow charts, photographs, to help illustrate the invention. Label the pictures with reference numerals and refer to the numerals in your written description.
- 1.5 Results: What advantages are provided by your invention? Briefly describe any efforts to make a prototype of your invention or to test your invention. Summarize the results of any related experiments and testing and highlight any results of particular significance.
- 1.6 Execution: Using the format illustrated below,

requirement addressed by your invention.

- (i) Each submitter must sign and date each page of the Description of the Invention and each sheet of any pictures provided as part of the disclosure.
- (ii) Two witnesses must read, understand, sign and date each page of the Description of the Invention and each sheet of any pictures provided as part of the disclosure.

Submitted By: Solaret	12/6/99	Witnessed, read and understood by:  Thoma Q. Mille.	6 Dec 99
Inventor's signature	Date	Witness's Signature	Date
	<del></del>	Clayton L. Kuhnell	1/6/99
Inventor's signature	Date	Witness's Signature  Without Court 1-6-00	Date
Inventor's signature	Date		

2.0 Inventor Information: Provide the following information for each inventor. Please note, the term "inventor" is not used here in a rigorous sense and, ultimately, identification of the proper inventors of an invention is a legal determination based on the claims of the patent application as filed. Use additional sheets if needed.

Print or Type	Inventor	Inventor	Inventor
Full Name	Brian Gerhardt		
Social Security Number	05, 400	:	
Home Address	- REDACTED -		
Citizenship	USA		
Mail Drop	4		
Work Telephone Number	REDACTED		
Department and Occupation	T CONICED .		

GE PROPRIETARY INFORMATION
Page 1 of 2





Name of Inventor Completing Form

Title of Invention

(A SEPARATE COPY OF THIS PAGE MUST BE SUBMITTED BY EACH INVENTOR.)

### 3.0 OTHER INFORMATION

1 REDACTED

3.3 Each named inventor <u>MUST FURNISH</u> the information requested below so that a determination can be made on whether the invention is reportable to the Government.

	Conception		First Built	Tested
Documented Date	7-16-99	Der	e-mail	
DAN No. (or overhead)		.,		
Was this work done under Government Contract?	Yes ( ) No ( x )		Yes ( ) No (x )	Yes ( ) No (x )
If Yes - Contract Number*				

\* Briefly describe the activity: \_

REDACTED

1' REDACTED

GE PROPRIETARY INFORMATION

Page 2 of 2

Brie Hernande 17 Clayton I. Kuhnell 1/6/00

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- 1.1 Virtual Warehouse Parts Distribution Process
- 1.2 Currently systems and processes do not provide for the visibility and integrated purchase of parts between users and suppliers utilizing a systematic picking rule approach to part selection and price.
- 1.3 Current systems allow searching by part number. None are integrated into legacy systems to release blanket purchase orders directly to the source. None follow a logical picking process through multiple stock classes and alternate part numbers or select by price.
- 1.4 1. Inventory part numbers, condition codes, serial numbers, TSN, CSN, quantity, etc. is uploaded to a central database. Supplier, condition and possibly part number segregate this database into sub-inventory categories.
  - 2. Pricing for parts, usually stated as a % of catalog list price, is uploaded.
  - 3. Part master files that identify part numbers and alternates reside in the database.
  - 4. Customer specific picking rules also found in the database allow for automated selection of parts when demanded using these files.
  - 5. This locates a part meeting the customer's demands in a prescribed picking order. The system then releases a blanket PO to the respective supplier requesting the necessary part and identifying the needed quantity and delivery location to ship to.
  - 6. When a part is selected by a customer it is immediately removed from the inventory file prohibiting others from picking parts that are gone.
- 1.5 The advantages are automatic selection following prescribed picking rules, multiple suppliers, increased service level, auto generation of blanket purchase orders, and lowest price selection. A pilot system will be implemented within the next two weeks.

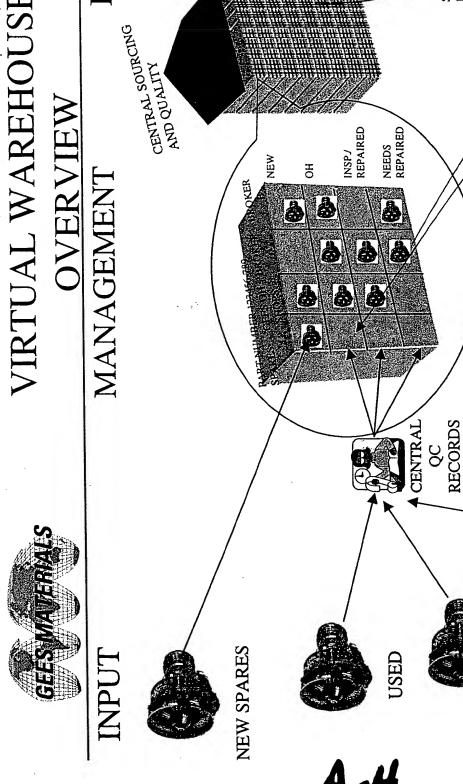
GE PROPRIETARY INFORMATION

Page 3 of 2

Brie Laborato 12/6/99

Mallal 1-6-00

Claute & V. L. 1/6/00



## VIRTUAL WAREHOUSE

EXECUTION

OH SHOPS To Repair Replacement Scrap

From Repair

Scrap Replacement

APPROVAL

SITE EXCESS

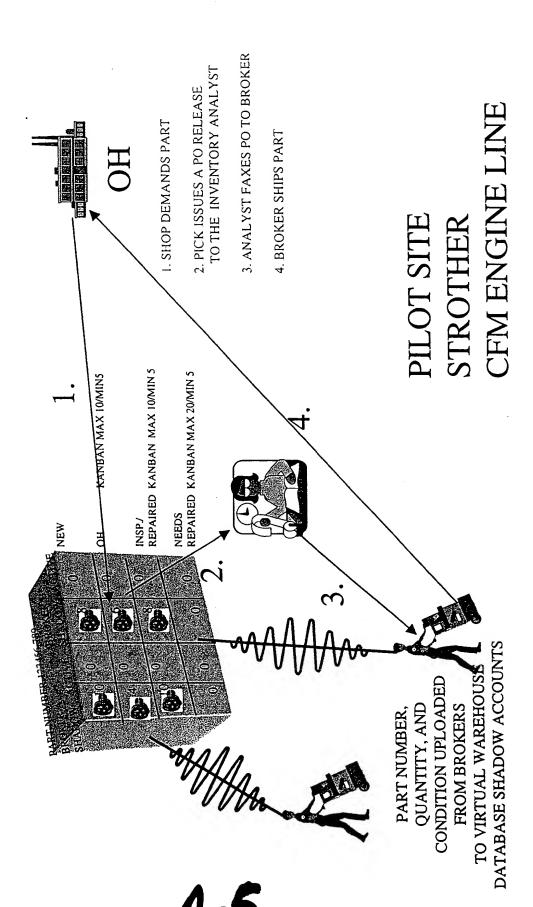
C/R SHOPS

Bri Lebards 12/6/99 Chapter & Kahall 1/6/00

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SITE ROTABLES



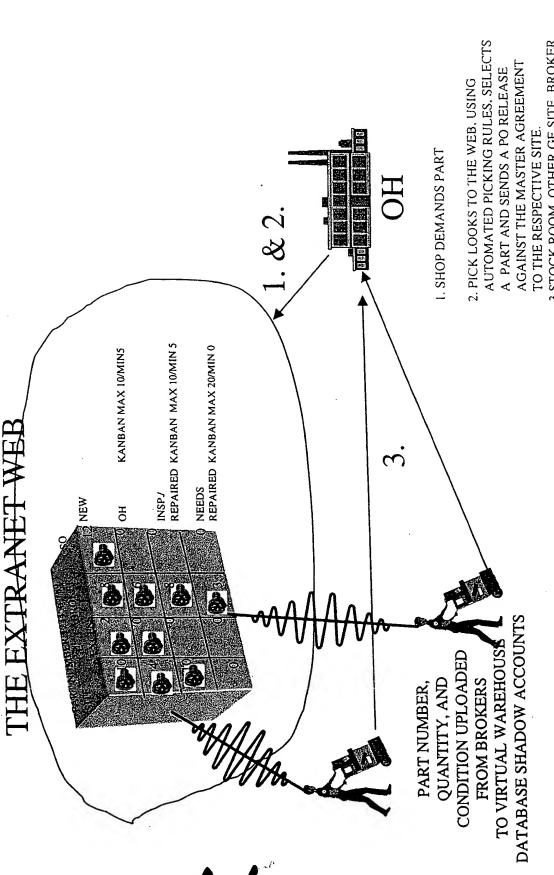


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### MRO PROCESS PHASE 1



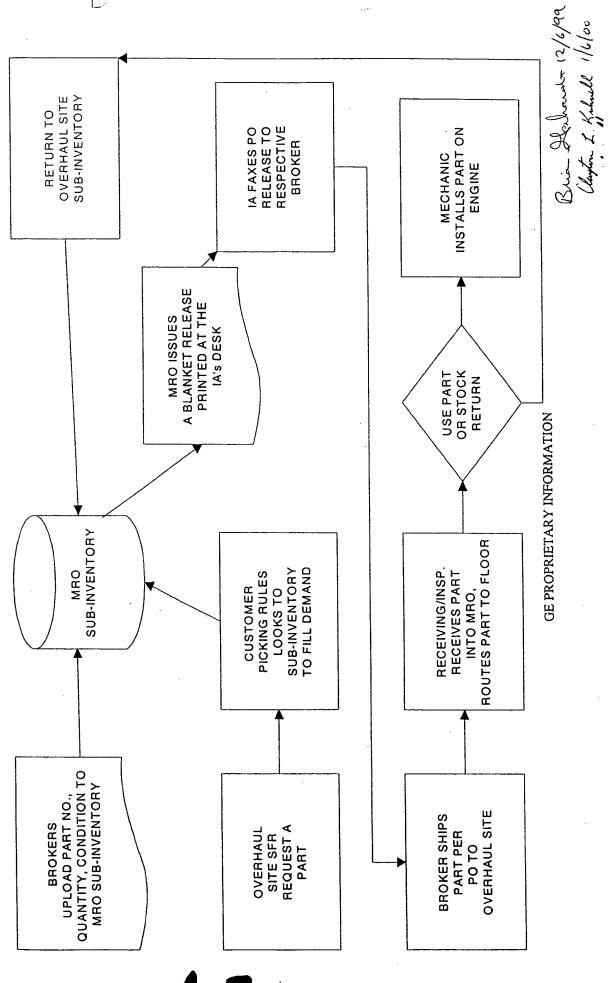
GE PROPRIETARY INFORMATION OR CSO SHIPS PART

Brin Heedrander 12/6/99 Chapter L. Kahall 1/6/00



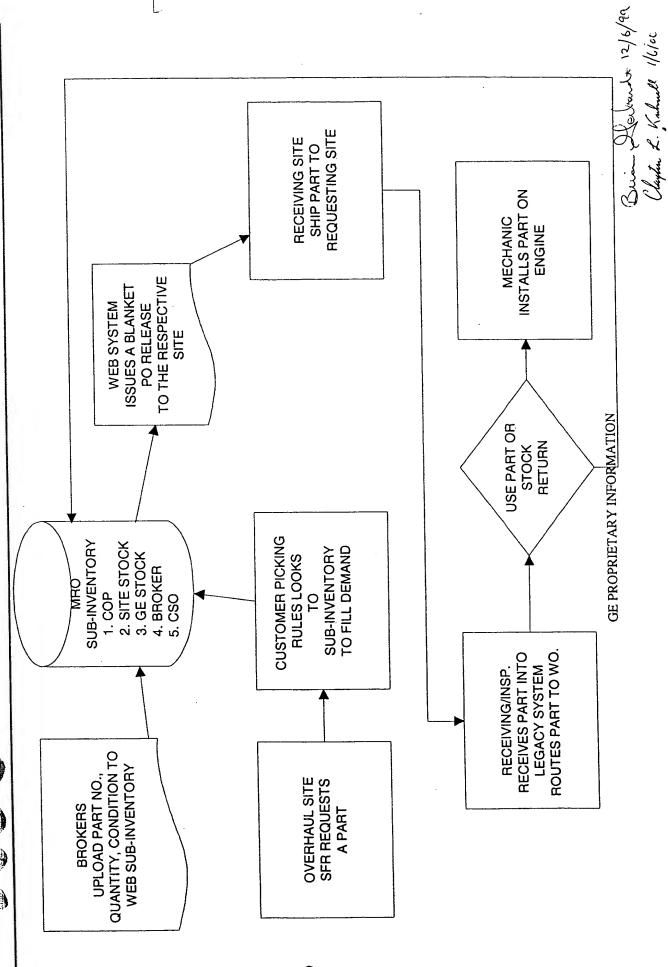
## PILOT PROCESS

MRO PILOT PROCESS

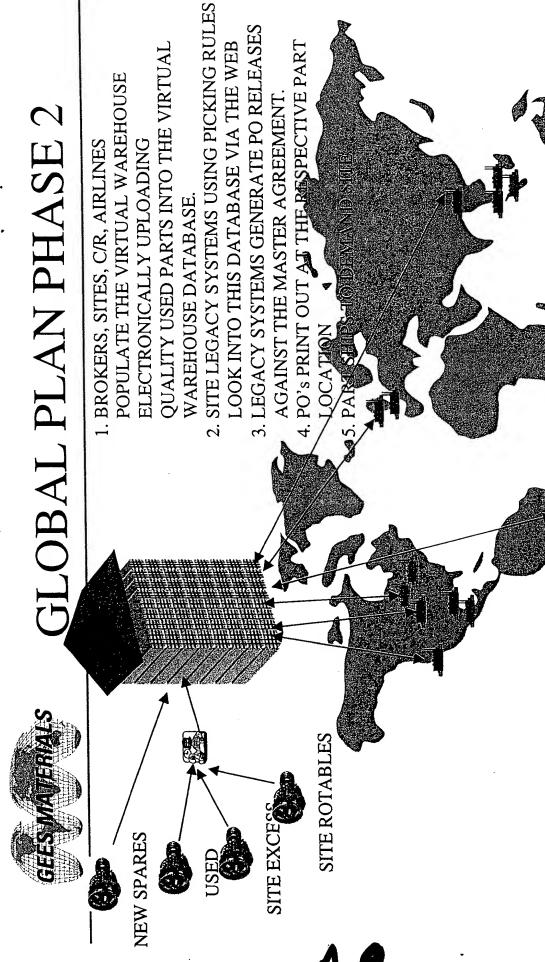




# WEB INTERFACED VIRTUAL WAREHOUSE



A-9



U OVERHAUL

COMPONENT REPAIR Chayton L. Kuhush 1/6/00

GE PROPRIETARY INFORMATION



### CTO'S

- AUTOMATIC PICKING RULES
- •BLANKET PURCHASE ORDERS
  - •AUTO RELEASE PO's
- •BROKER UPLOADING
- •REPORTING
- •QUALITY CONTROL
- •100% SL

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